



UNITED STATES DEPARTMENT OF COMMERCE
Pat nt and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

John

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/625,071	07/25/00	MOSTAFAZADEH	S NS-3877-2D U

EDWARD C. KWOK
SKJERVEN MORRILL MACPHERSON LLP
SUITE 700
25 METRO DRIVE
SAN JOSE CA 95110-1349

MMC1/1127

EXAMINER

CLARK, S

ART UNIT

PAPER NUMBER

2815

DATE MAILED:

11/27/00 *3*

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/625,071

Applicant(s)
Mostafazadeh et al

Examiner
S.V.Clark

Group Art Unit
2815



☒ Responsive to communication(s) filed on Jul 25, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 11-17 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 11, 12, and 14-17 is/are rejected.

☒ Claim(s) 13 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2815

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 12 are rejected under 35 U.S.C. 102(b) as being anticipated by

McShane et al.

McShane et al teaches substantially all of the structural features recited in the claims wherein McShane shows a leadframe having leads 22 and die pad 15 and wherein figure 1 shows leads 22 having a lower surface 18 substantially coplanar with pad 15, bond wires 38 and encapsulant 17 is shown exposing a lower surface of the lower surface of the die pad and leads. Solder balls 26 are shown as recited in figure 1.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 14, 15, 16, 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yamaguchi.

Yamaguchi teaches substantially all of the structural features recited in the claims wherein Yamaguchi shows a leadframe having leads 56 and die pad 52 and wherein figure 5b shows leads

Art Unit: 2815

56 having a lower surface substantially coplanar with pad 52, bond wires 3. Encapsulant 55 is shown exposing a lower surface of the die pad and leads. A plurality of packages are shown in figure 4a and said lead frame is shown formed on a metal plate or panel.

Claims 14, 15, 16 and 17 contain method of making characteristics (i.e. fabricated simultaneously, arranged, singulation) given no patentable weight in determining the patentability of the final device structure.

Note that a "product by process" claim is directed to the product per se, no matter how actually made, In re Hirao 190 USPQ 15 at 17(footnote 3). See also In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Fessman, 180 USPQ 324; In re Avery, 186 USPQ 161 and In re Marosi et al, 218 USPQ 289, all of which make it clear that it is the patentability of the final product per se which must be determined in "product by process" claims, and not the patentability of the process, and that, as here, an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not.

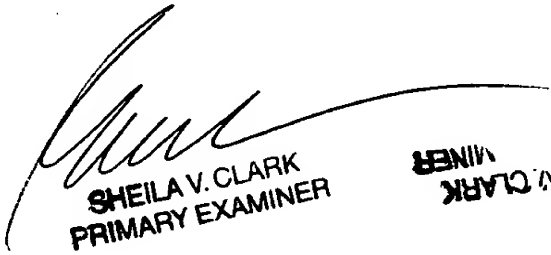
Claims 11, 12, 14, 15, 16, 17 are rejected

Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Mostafazadeh et al 5,663,593), Aono et al, Glenn, Chew et al and Mostafazadeh et al (6130473) are cited to show lead and die pads having bottom surfaces exposed from die pads.

Any inquiry concerning this communication should be directed to Examiner S.V.Clark at telephone number (703) 308-4924.

November 25, 2000


SHEILA V. CLARK
PRIMARY EXAMINER

CLARK, S.V.
EXAMINER